

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



(19)

(11) Publication number:

59044382 A

Generated Document.

PATENT ABSTRACTS OF JAPAN(21) Application number: **57154788**(51) Intl. Cl.: **C07D405/04**(22) Application date: **06.09.82**

(30) Priority:

(43) Date of application
publication: **12.03.84**(84) Designated contracting
states:(71) Applicant: **MITSUBISHI CHEM IND LTD**(72) Inventor: **TANIGUCHI SEIRO
MORITA YOSHIMI
HAYAKAWA SHUZO**

(74) Representative:

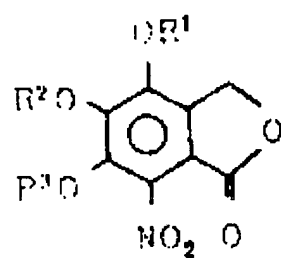
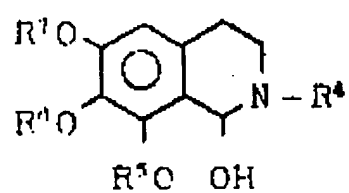
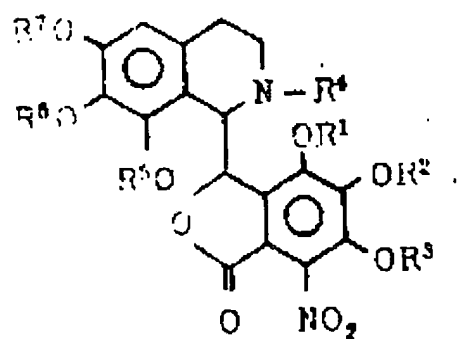
**(54) PREPARATION OF
PHTHALIDE ISOQUINOLINE**

(57) Abstract:

PURPOSE: To obtain the titled compound useful as a synthetic intermediate for an antiallergic agent tritoqualine, etc. in high yield, by reacting a nitrophthalide with an isoquinoline in methanol.

CONSTITUTION: A nitrophthalide of formula I (R1, R2 and R3 are lower alkyl) is reacted with an isoquinoline of formula II (R4, R5, R6 and R7 are lower alkyl; R5 and R6 together may form a methylene group) in methanol at 50W80°C for 8W36hr to give the aimed substance of formula III. The amount of the methanol to be used is 1.5W10 times, preferably 2.5W3 times, based on the compound of formula I, and the compound of formula II is used in an equimolar amount based on the compound of formula I. The aimed substance exhibits the 1RS- 3'RS form in the same configuration as that of the tritoqualine, and the method is industrially advantageous.

COPYRIGHT: (C)1984,JPO&Japio

**I****II****III**